PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Thomas M. BREUEL et al.

Application No.: 10/064,892

Filed: August 27, 2002   Docket No.: 111744

For: METHOD AND SYSTEM FOR DOCUMENT IMAGE LAYOUT
        DECONSTRUCTION AND REDISPLAY SYSTEM

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

A Notice of Appeal is attached. Applicants respectfully request review of the Final

Rejection mailed November 1, 2007 regarding the above-identified application in light of the

following remarks.

Claims 1, 3-13, 16 and 18-28 are pending in this application. The Office Action

rejects claims 1, 3-13, 16 and 18-28 under 35 U.S.C. §103(a) over U.S. Patent No. 7,028,258

to Thacker et al. (hereinafter "Thacker") in view of U.S. Patent No. 6,895,552 to Balabanovic

et al. (hereinafter "Balabanovic"). This rejection is respectfully traversed.

The present subject matter is directed to a method of converting a document in a page-

image format into a form suitable for an arbitrarily sized display. Claim 1 recites, among

other features, a method of converting a document in a page-image format into a form

suitable for an arbitrarily sized display, comprising in sequential order: deconstructing a

document in a page image format into a set of segmented image elements; synthesizing the

deconstructed document into an intermediate data structure that is convertible into a commercially available format; and distilling the intermediate data structure for redisplay by converting the intermediate data structure into a format usable for reflow on an arbitrarily sized display, wherein the intermediate data structure is automatically adaptable at the time of display to constraints of any display device or circumstance of viewing. Claim 16 recites similar features.

Thacker is directed to systems and methods for dynamic pagination on a given device. In such a device, the parameters of, for example, a display device 406, are preset. Therefore, one of ordinary skill in the art would not have been motivated to modify Thacker to include all of the features of claims 1 and 16, the subject matter of which is directed to converting a document in a page-image format into a form suitable for <u>an arbitrarily sized display</u>. To modify the Thacker device to include features related to reflow on an arbitrarily sized display would unnecessarily complicate the Thacker method. If Thacker were modified to first receive a document in a page-image format, the constraints of the display device would be known <u>prior to any deconstructing or synthesizing</u>. As such, it would not have been obvious to one of ordinary skill in the art to deconstruct and/or synthesize the document in a page-image format in the manner recited in claims 1 and 16, only to then adapt it to <u>a display that was already known</u>.

The Office Action concedes that Thacker fails to disclose a number of the features recited in the independent claims, including deconstructing a document in a page image format into a set of segmented image elements, and synthesizing the deconstructed document into an intermediate data structure. The Office Action relies on Balabonavic to remedy these shortfalls. The Office Action asserts that it would have been obvious to one of ordinary skill in the art to modify Thacker to include these features "because of all of the reasons found in Thacker including optimizing an electronic version of a paper document for display in

different devices." However, the referenced portion of Thacker deals with the benefits of

segmenting a document into portions, such as chapters of a book, where only one "segment"

at a time has to be paginated on-the-fly. Thus, only the currently desired page of the segment

needs to be rendered for display. This would not have motivated one of ordinary skill in the

art to include features such as deconstructing a document in a page image format into a set of

segmented image elements, and synthesizing the deconstructed document into an intermediate

data structure, as recited in claim 1.

Additionally, Thacker fails to disclose features relied upon by the Office Action. The

Office Action asserts that Thacker discloses "dividing a document." However, in Thacker,

the document 100 is in a format where text may be poured into a series of slots of a page.

Thacker teaches segmenting a document, such as into chapters or articles, to provide for

quicker dynamic pagination, in that the entire electronic book does not have to be paginated

dynamically *a priori*, but only the current segment of interest (see, e.g., col. 8, lines 41-47 of

Thacker). Thacker is not directed to a method of converting a document in a page-image

format.

Finally, Thacker cannot reasonably be considered to disclose distilling an intermediate

data structure for redisplay by converting the intermediate data structure into a format usable

for reflow on an arbitrarily sized display. Thacker does not discuss converting an

intermediate data structure into a format usable for reflow on an arbitrarily sized display. The

method of Thacker assumes a current position in the text defined by the paginatable segment,

each of a number of pages has a predetermined number of slots, and predetermined page

layouts (see, col. 8, lines 63 - col. 9, line 5, and claim 1 of Thacker).

The Examiner provides a limited response to these arguments in the Advisory Action.

First, the Examiner alleges that the proposed modification of Thacker would not

unnecessarily complicate that device because Thacker's invention takes any document,

regardless of size, and distills or customizes it to fit "any" device, tablet PC, PDA, etc. However, this misconstrues both the disclosure of Thacker, and the argument that the proposed modification would be unreasonable. Specifically, Thacker discloses a system that can perform those functions <u>on an individual device,</u> in which the details of the display <u>are known</u> and the document is modified <u>in accordance with the known display.</u> As such, Applicants maintain that Thacker does <u>not</u> distill a document to fit "any" device, and that the asserted modification of Thacker would not have been obvious.

The Advisory Action also attempts to rebut several of the above arguments by generally asserting that, because Balabonovic indicates that the segmenting of image documents is used in OCR applications, it would have allegedly been obvious to modify Thacker to utilize the technique of Balabonovic to convert the image into text segments. However, in Thacker, the document 100 is in a format where text may be poured into a series of slots of a page. It would not have been obvious to one of ordinary skill in the art to modify Thacker to deconstruct and synthesize a document <u>into an intermediate data structure</u> that is automatically adaptable at the time of display to constraints of <u>any display device or circumstance of viewing</u> based on the totality of the disclosure of Thacker. On the contrary, the Examiner appears to be picking and choosing isolated features of the references without considering the teachings of the references, or the claims, <u>as a whole</u>

In summary, the applied references cannot reasonably be considered to have suggested the combinations of all of the features positively recited in at least independent claims 1 and 16. Additionally, claims 3-13 and 18-28 also would not have been reasonably suggested by the applied references for at least the respective dependence of these claims, directly or indirectly, on an allowable base claim, as well as for the separately patentable subject matter that each of these claims recites.

In view of the foregoing, Applicants respectfully request that the Review Panel review the substance of the November 1, 2007 Final Rejection in light of the above remarks. Applicants believe that, upon such review, the Review Panel will determine that a *prima facie* case for obviousness of the subject matter of the pending claims has not been established. In this regard, favorable reconsideration and prompt allowance of claims 1, 3-13, 16 and 18-28 are earnestly solicited.

Should the Review Panel believe that anything further would be desirable in order to place this application in even better condition for allowance, the Review Panel is invited to contact Applicants' undersigned representative.

Respectfully submitted,

James A. Oliff
Registration No. 27,075

James E. Golladay, II
Registration No. 58,182

JAO:JEG/clf

Attachments:
    Notice of Appeal
    Petition for Extension of Time

Date: March 3, 2008

OLIFF & BERRIDGE, PLC
P.O. Box 320850
Alexandria, Virginia 22320-4850
Telephone: (703) 836-6400

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